

# KIC 007188126

## Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	$R_{\star}$ ( $R_{\odot}$ )	$T_{\star}$ (K)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007188126-01	OBS	No	1.133073	131.910565	0.4	11.274	8.2	0.3	1.59	6875	0.11	9087.66

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007188126-01	OBS	FP	0.00	1	0	0	0	LPP_DV

**Notes:** OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

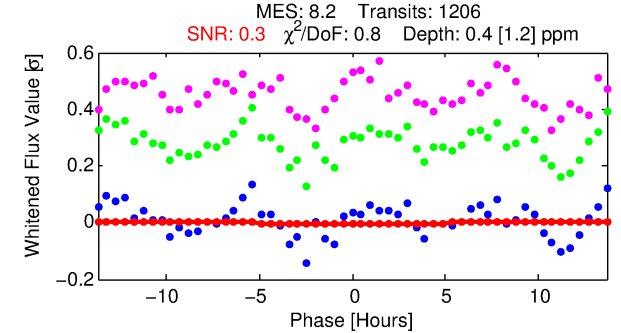
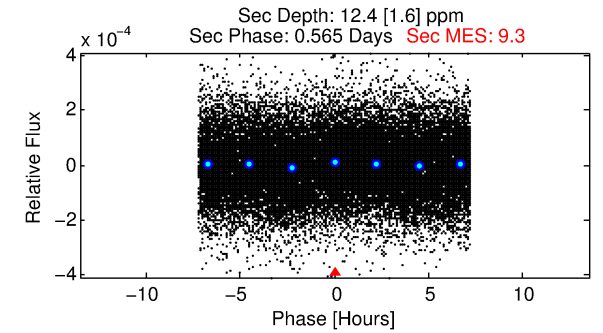
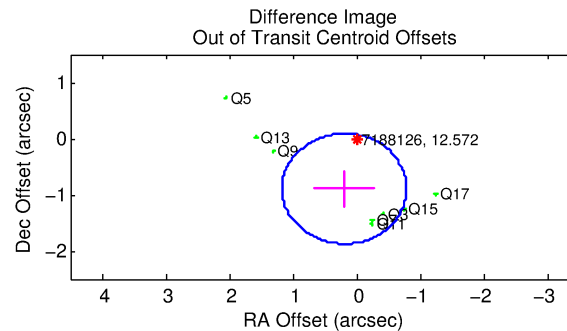
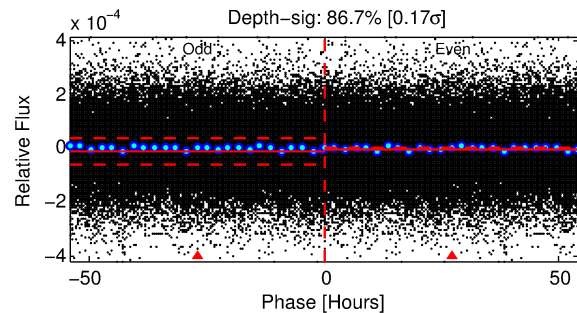
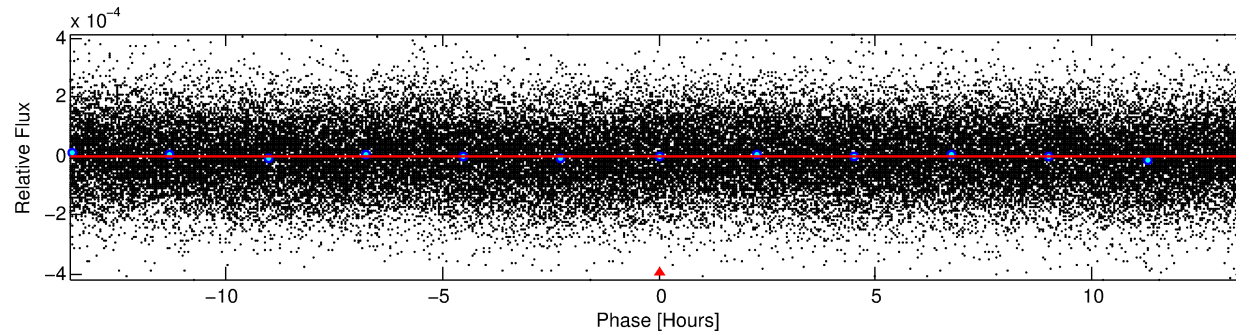
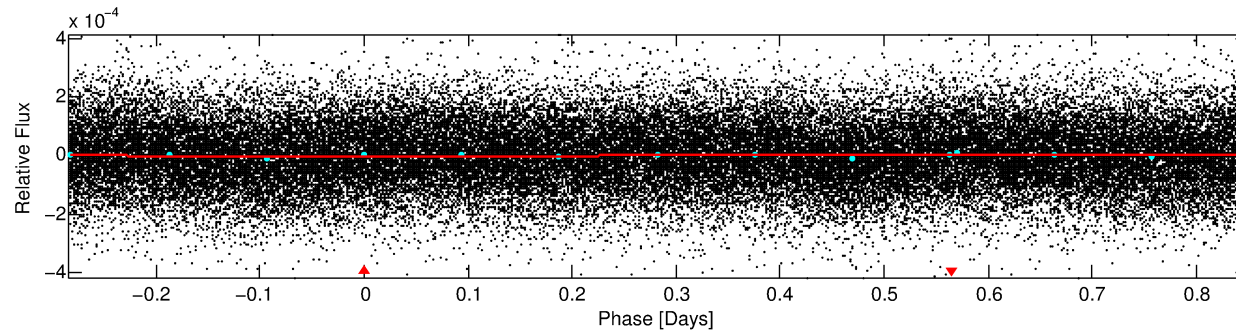
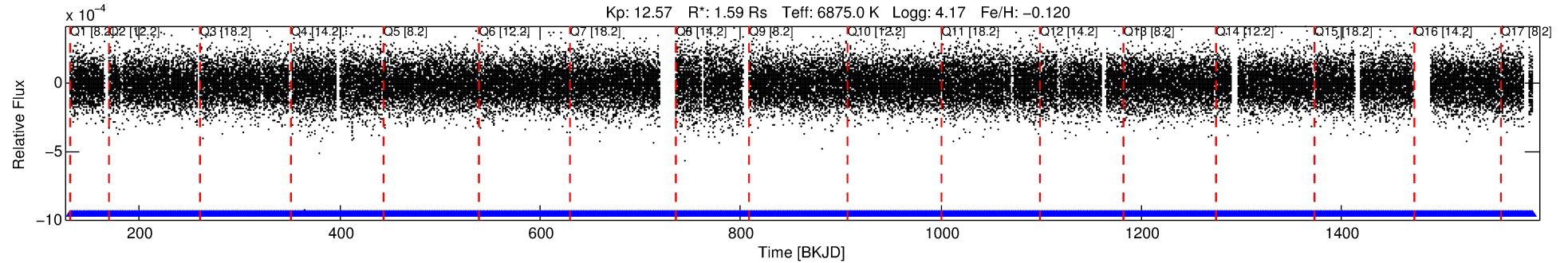
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 007188126-01

No Significant Match Found

# DV One-Page Summary

KIC: 7188126 Candidate: 1 of 1 Period: 1.133 d



## DV Fit Results:

Period = 1.13307 [0.00061] d  
Epoch = 131.9106 [0.2013] BKJD  
Rp/R\* = 0.0006 [0.0100]  
a/R\* = 1.01 [2.66]  
b = 0.80 [43.38]  
Seff = 9087.66 [2024.10]  
Teff = 2490 [139] K  
Rp = 0.11 [1.73] Re  
a = 0.0236 [0.0036] AU  
Ag = 318.38 [10055.70] [0.03 $\sigma$ ]  
Teffp = 16260 [128387] K [0.11 $\sigma$ ]

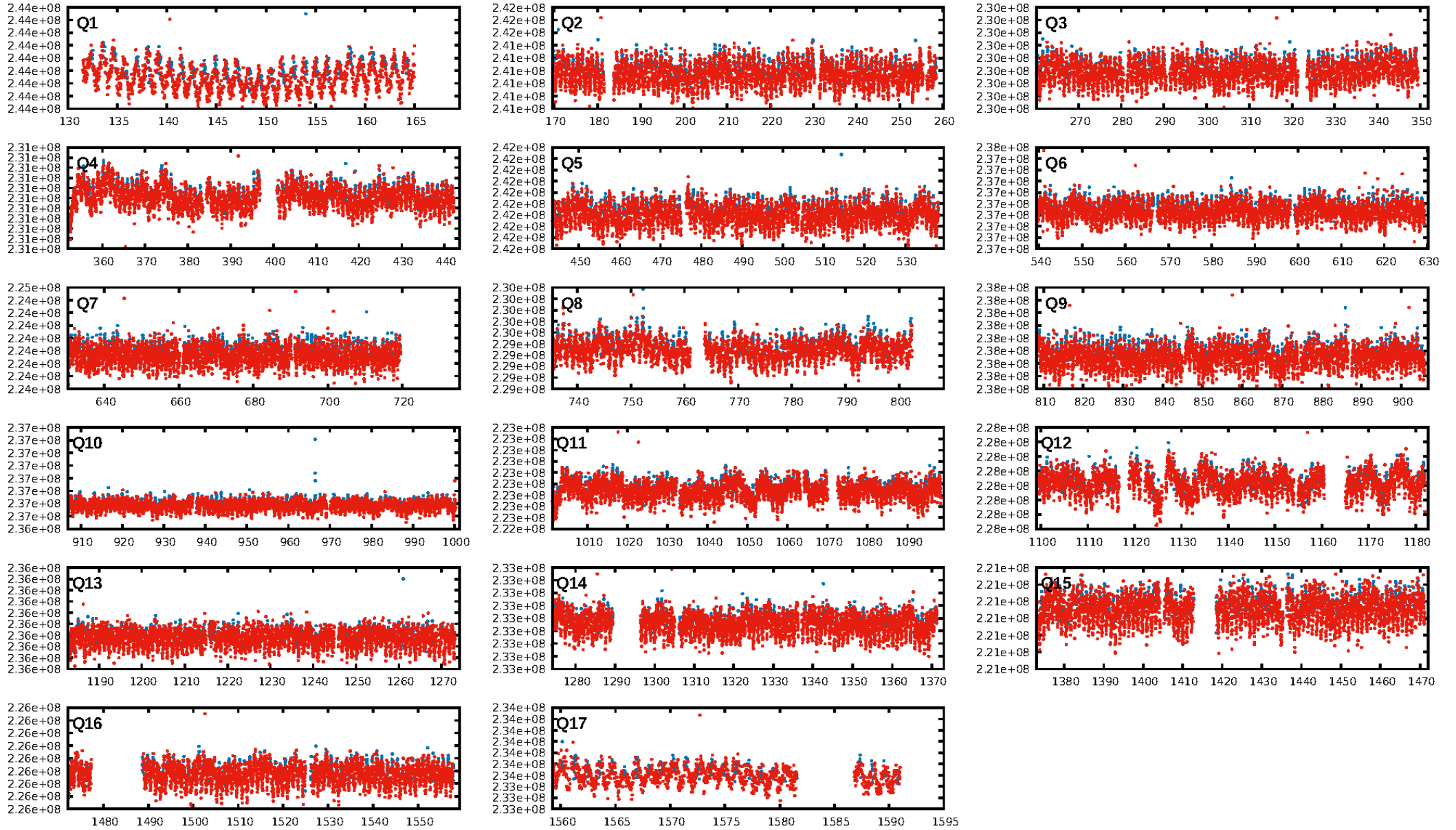
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [1152/1152]  
GhostDiagnostic-chr: N/A  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.915 arcsec [2.80 $\sigma$ ]  
KicOffset-rm: 0.916 arcsec [2.67 $\sigma$ ]  
OotOffset-st: 0/4/0/4 [8]  
KicOffset-st: 0/4/0/4 [8]  
DiffImageQuality-fgm: 1.00 [8/8]  
DiffImageOverlap-fno: 1.00 [17/17]

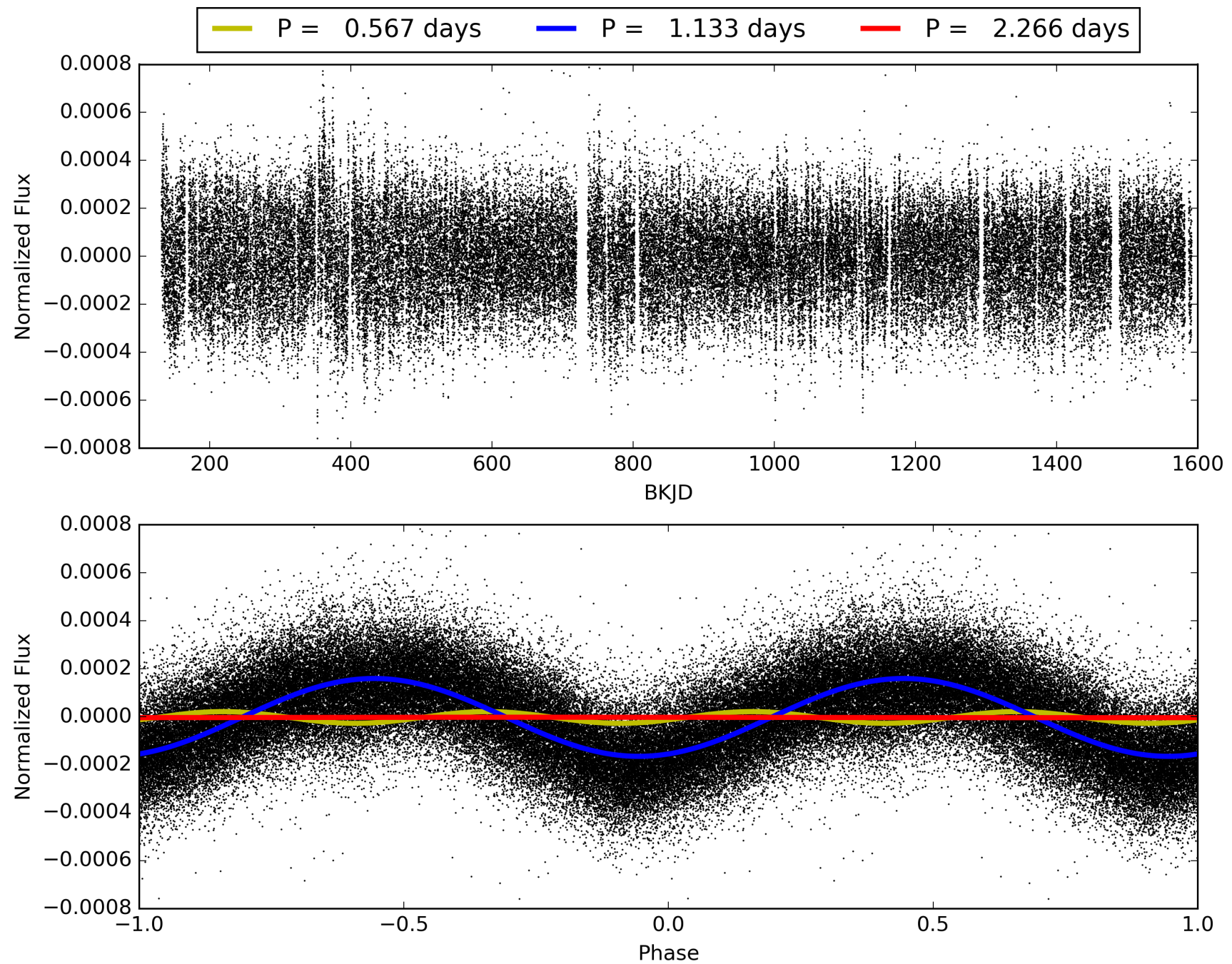
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 18:04:41 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 007188126-01, PDC Light Curves

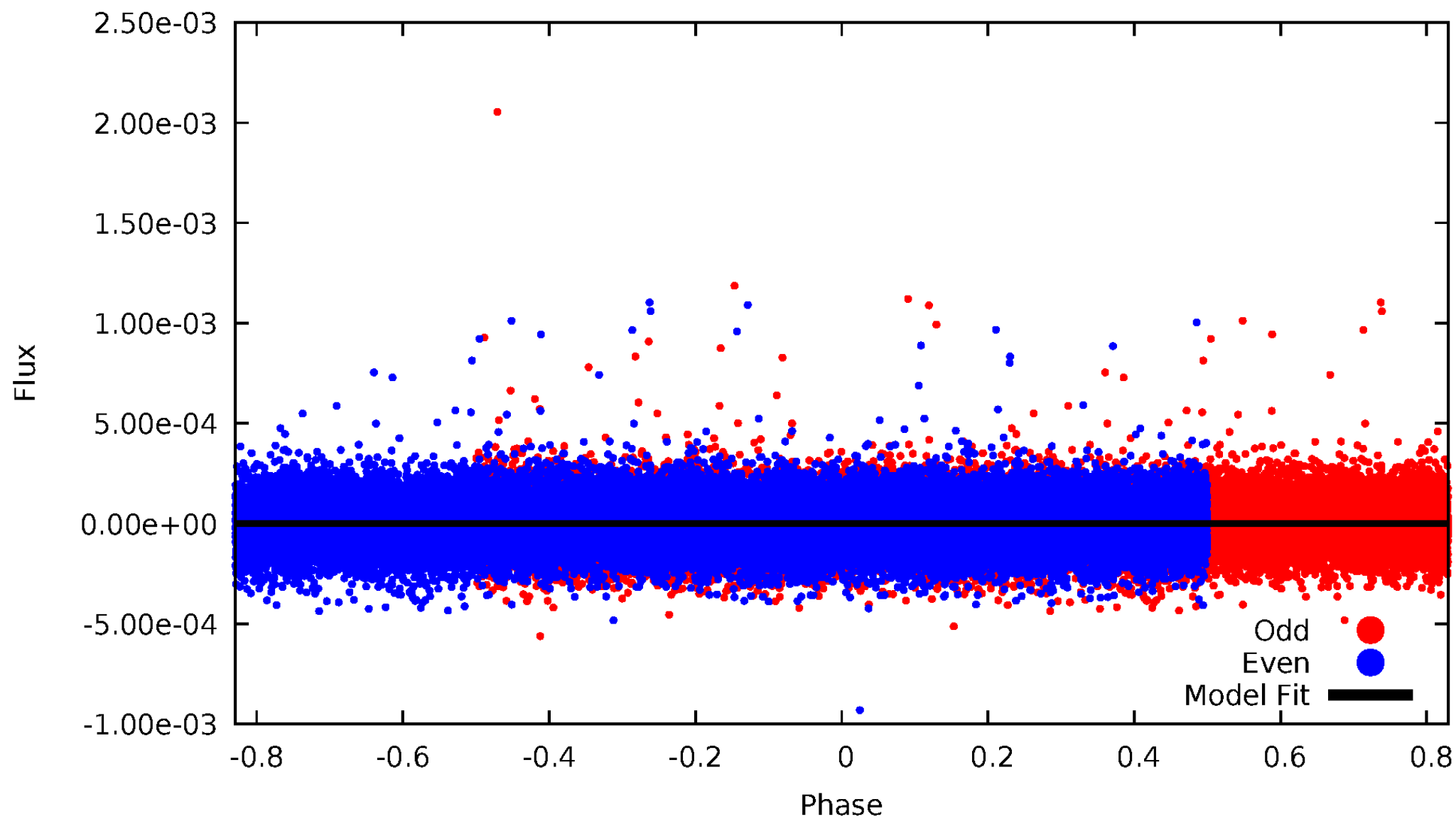


TCE 007188126-01



# DV Odd/Even

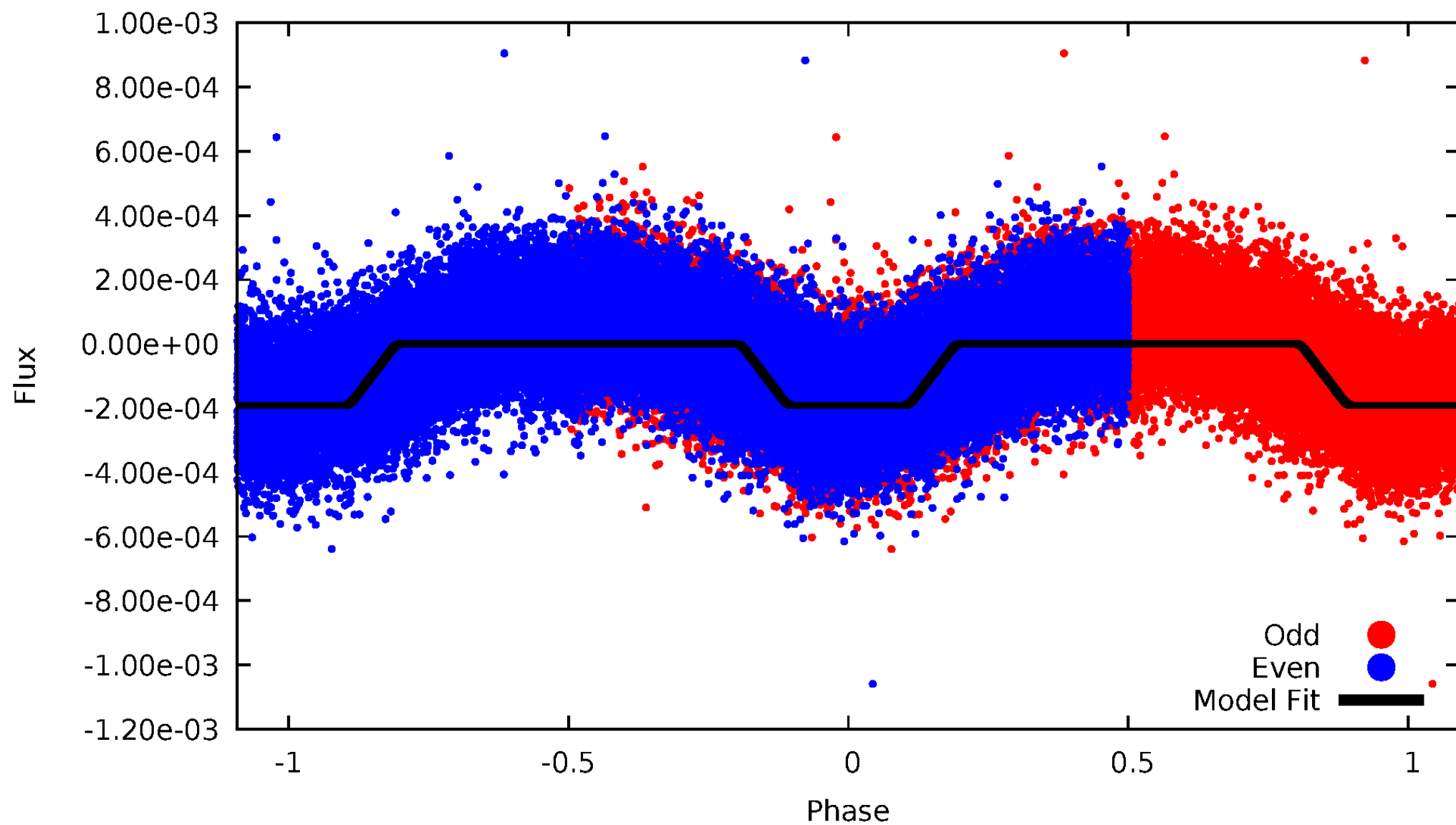
TCE 007188126-01





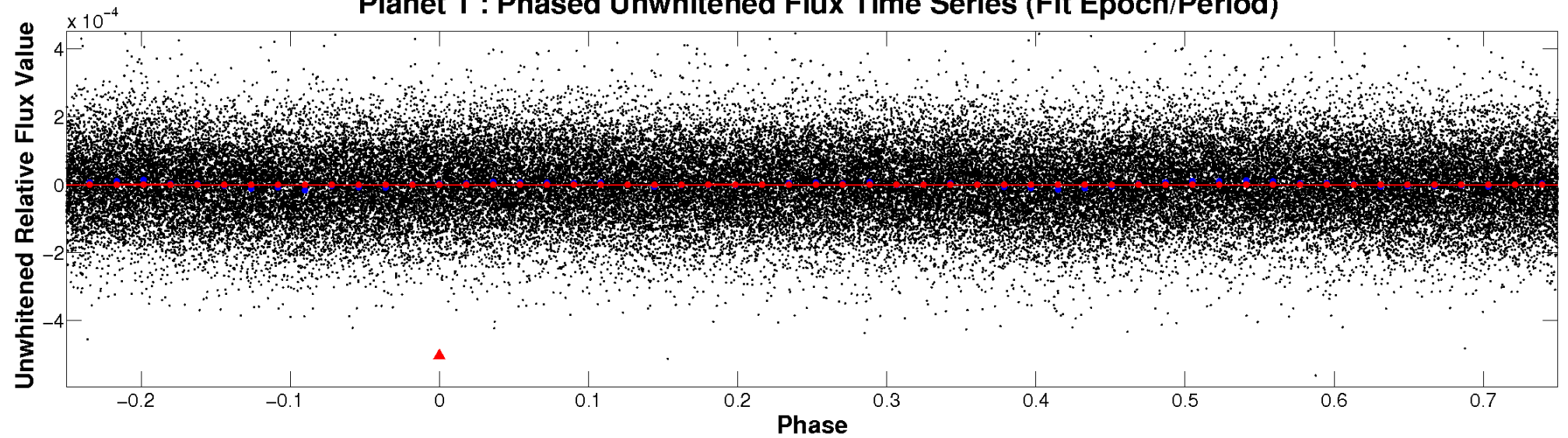
# ALT Odd/Even

TCE 007188126-01

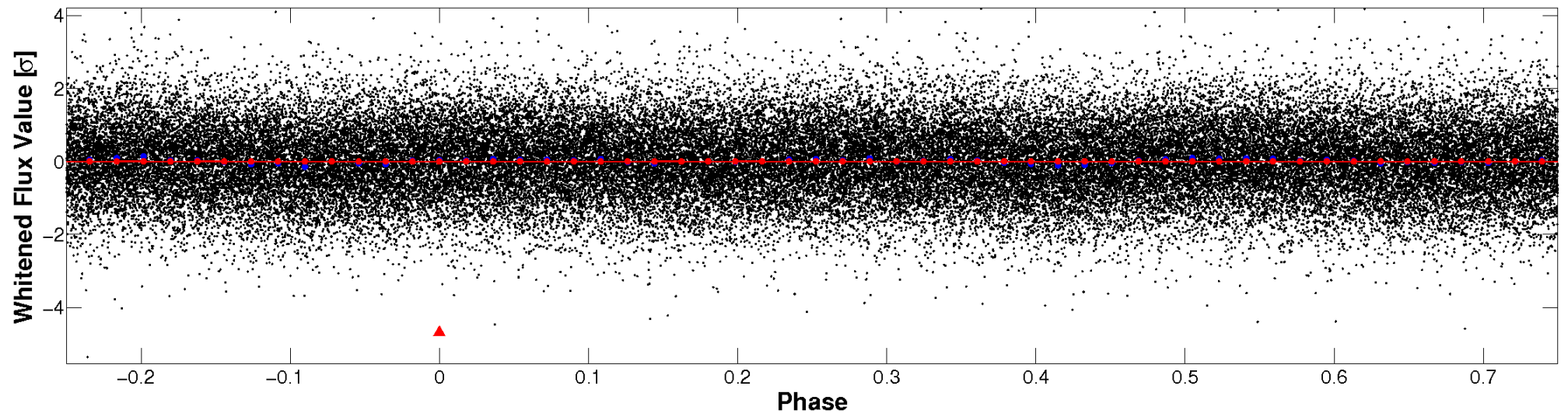


# Non-Whitened Vs. Whitened Light Curve

**Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)**

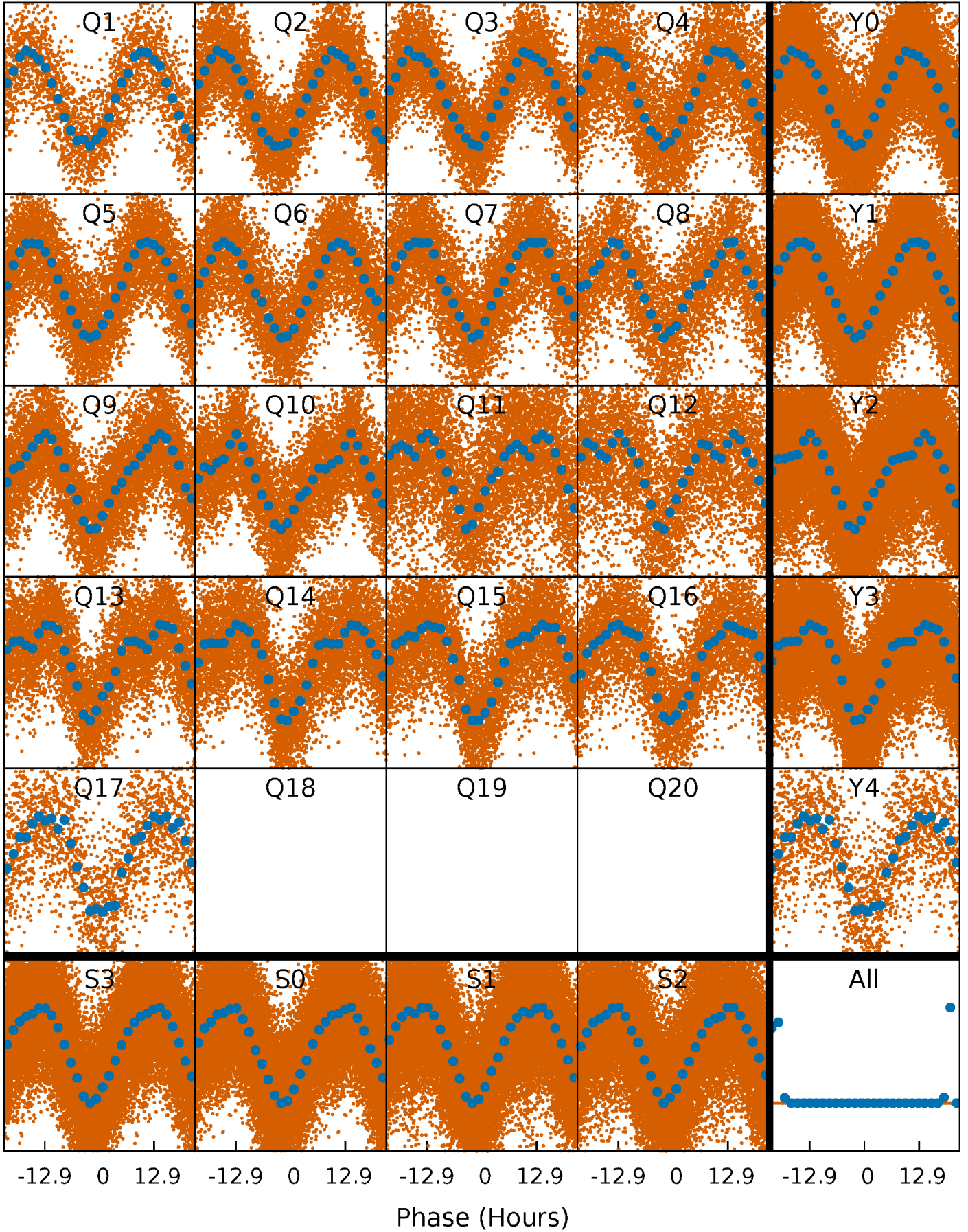


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

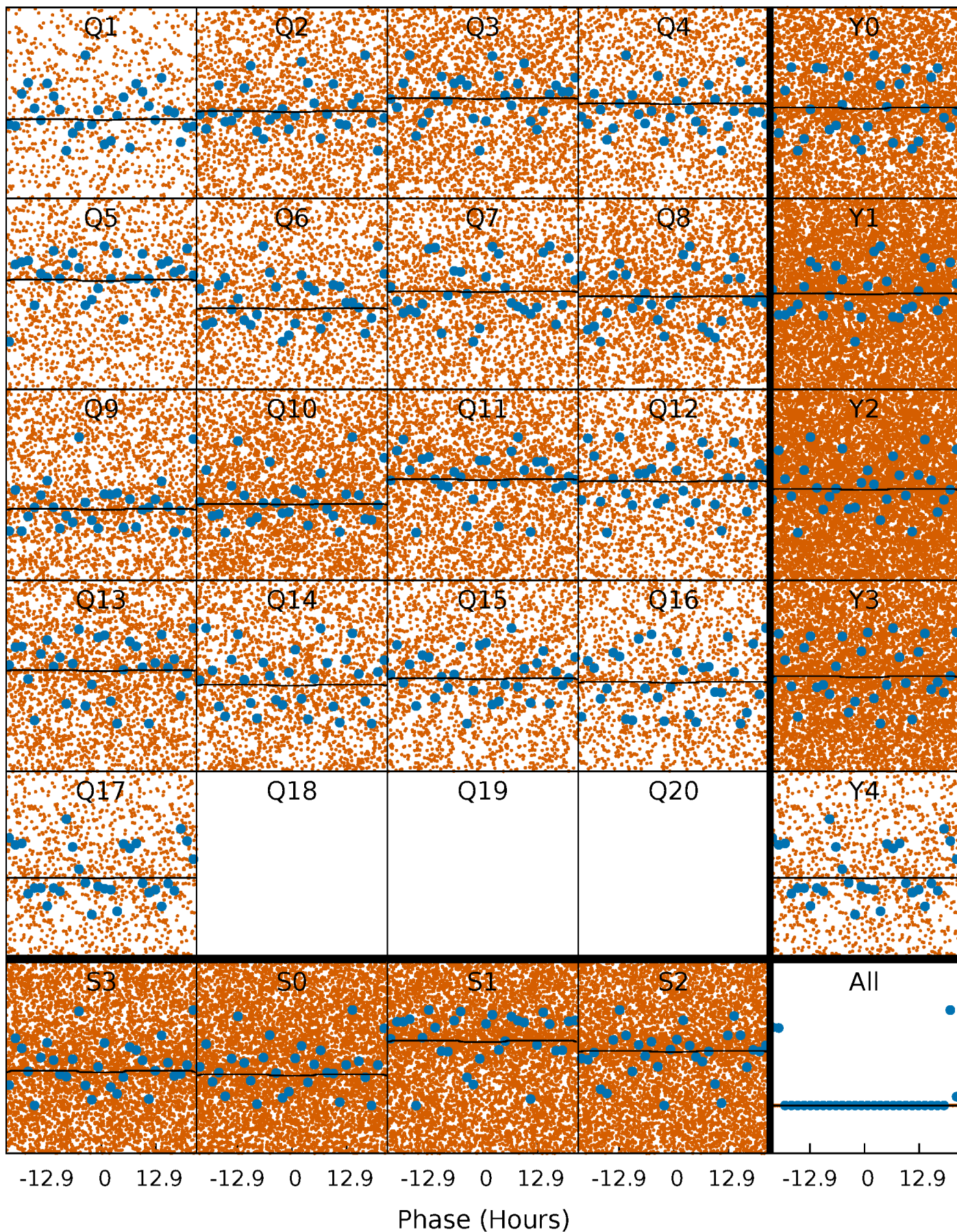
TCE 007188126-01   P= 1.133073 Days    $T_0=131.910565$  (BKJD)





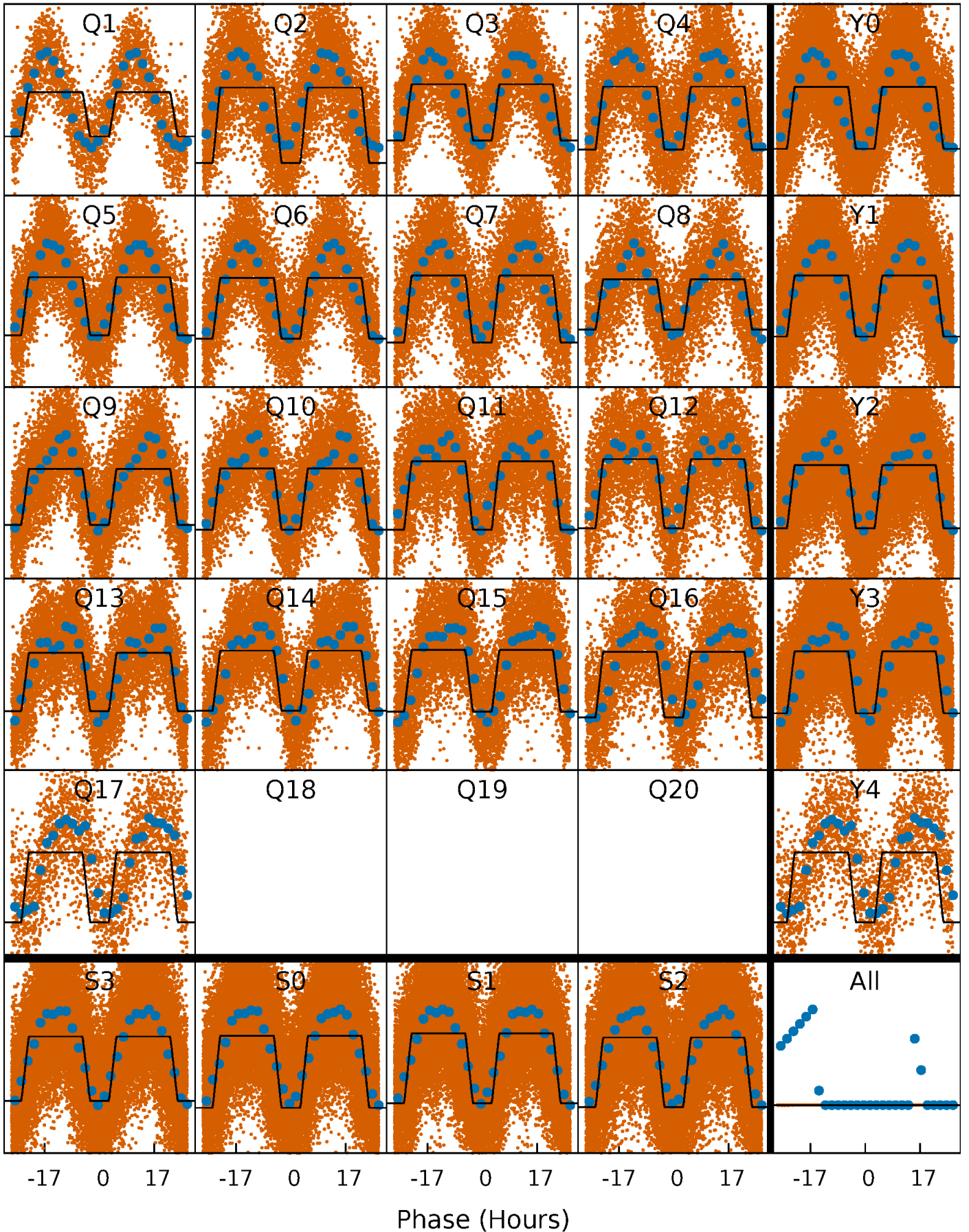
# DV Quarter-Phased Transit Curves

TCE 007188126-01 P= 1.133073 Days  $T_0=131.910565$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

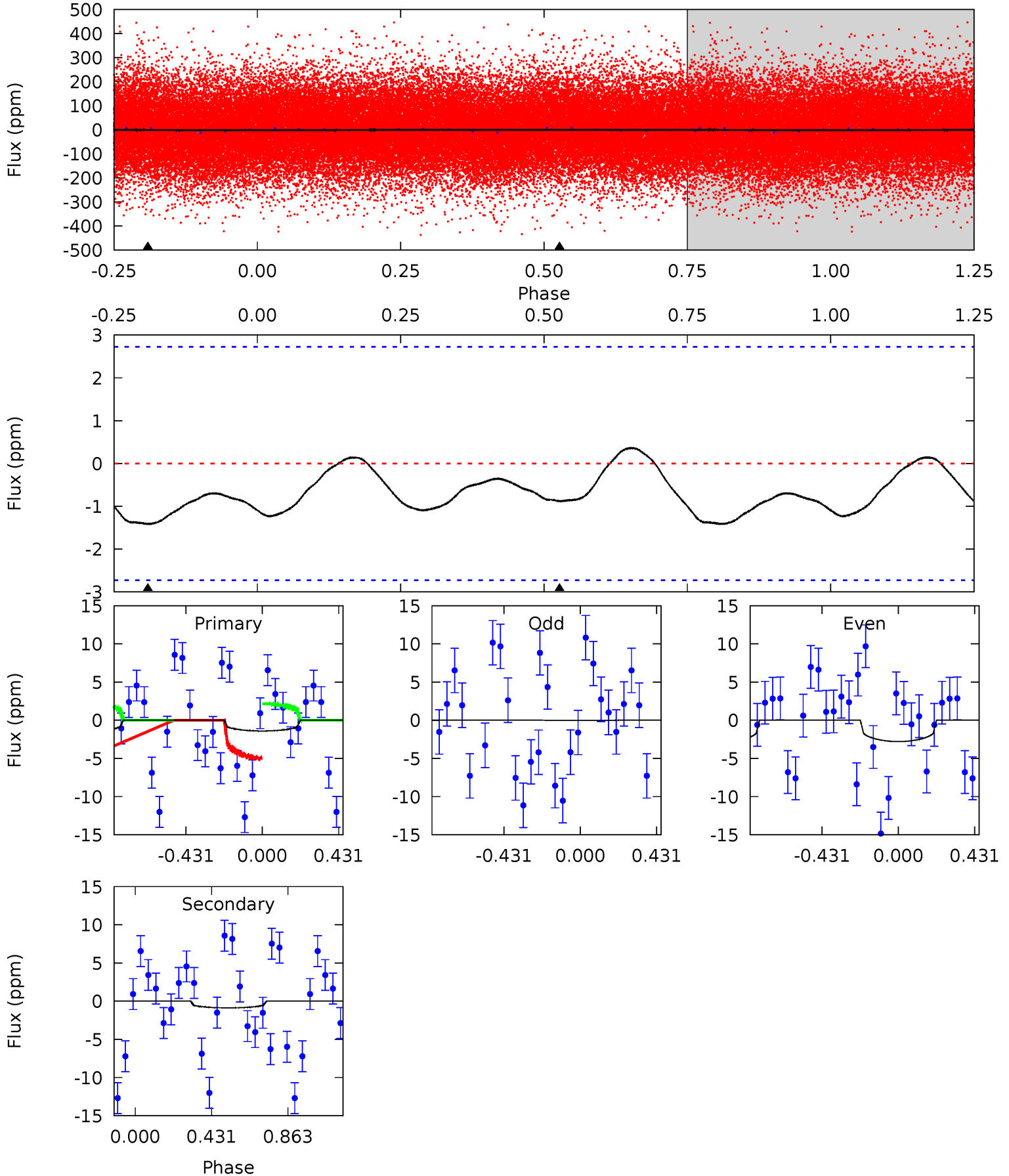
TCE 007188126-01 P= 1.132964 Days  $T_0=131.911581$  (BKJD)



# DV Model-Shift Uniqueness Test

007188126-01, P = 1.133073 Days, E = 130.777492 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.20	1.37	0	0	4.25	0.79	0.23	2.20	2.20	1.37	1.37	2.16	2.12	0.20	2.20

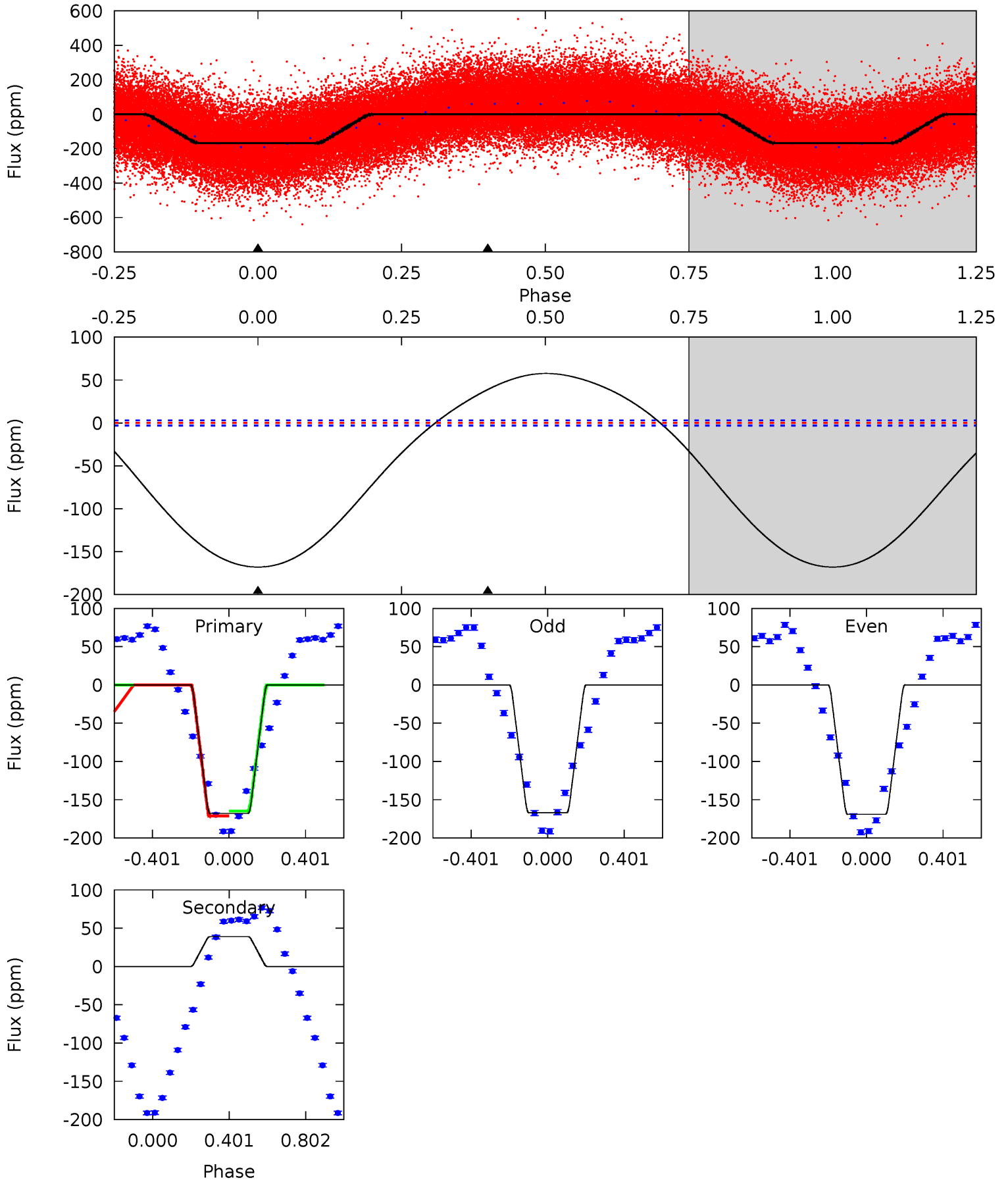




# Alt Model-Shift Uniqueness Test

007188126-01, P = 1.132964 Days, E = 130.778617 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
230.7	-53.6	0	0	4.26	0.84	23.6	230.7	230.7	-53.6	-53.6	1.42	1.01	0.26	4.44





### Stellar Parameters For KIC 007188126

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6875^{+72}_{-92}$	$4.171^{+0.095}_{-0.116}$	$-0.120^{+0.150}_{-0.150}$	$1.593^{+0.293}_{-0.195}$	$1.380^{+0.099}_{-0.099}$	$0.481^{+0.200}_{-0.165}$
	+1%/-1%	+2%/-3%	+125%/-125%	+18%/-12%	+7%/-7%	+41%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology  
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

### Secondary Eclipse Parameters for KIC 007188126-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$-1 \pm 1$	$1.23^{+1.39}_{-0.89}$	$3484^{+158}_{-130}$	$-3039^{+7588}_{-318}$	$0.150^{+1.933}_{-0.131}$
Alt.	$39 \pm 1$	$2.50^{+1.67}_{-1.45}$	$3480^{+167}_{-130}$	$-4804^{+665}_{-2187}$	$-1.855^{+1.151}_{-8.672}$

$T_{max}$  = Theoretical Maximum Planetary Temperature

$T_{obs}$  = Observed Planetary Temperature (Assuming A=0.3)

$A_{obs}$  = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if  $T_{obs} \gg T_{max}$  AND  $A_{obs} \gg 1.0$

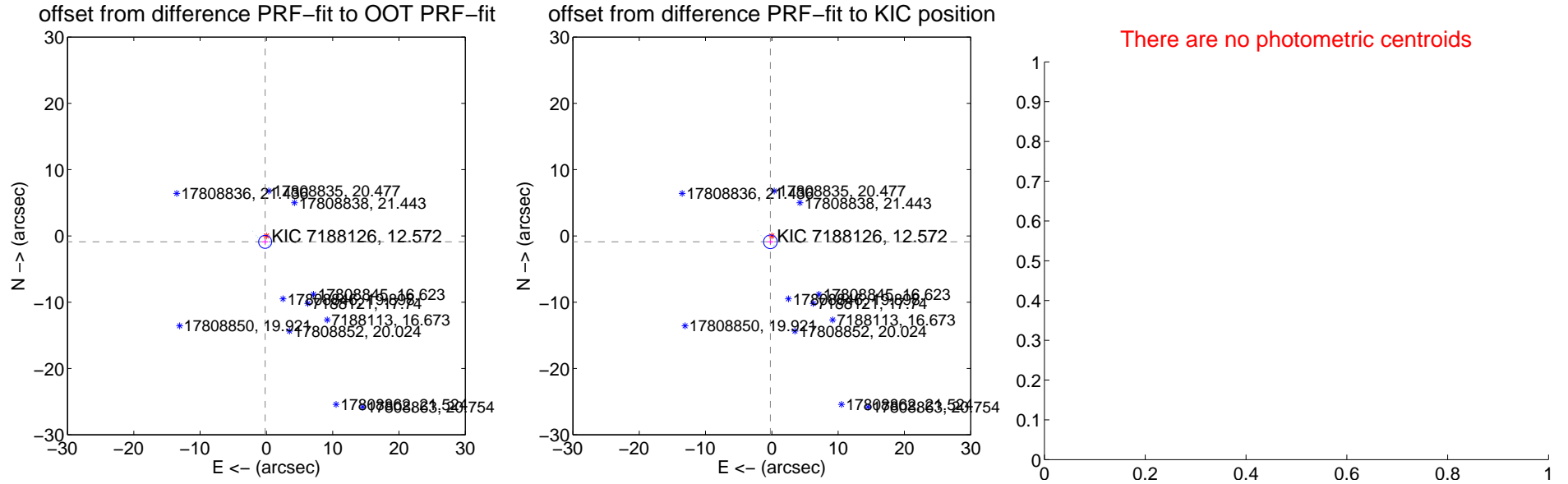
## DV Centroid Data

Supplemental centroid analysis for 007188126-01. Kepler magnitude: 12.57. Transit SNR 0.35

There are 8 quarters with good PRF difference image offsets

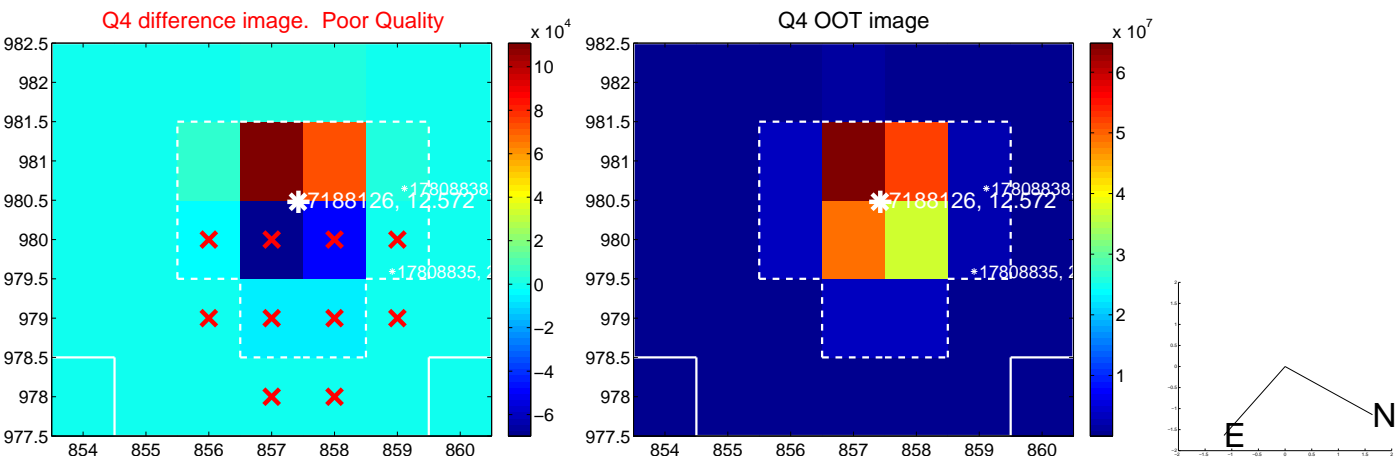
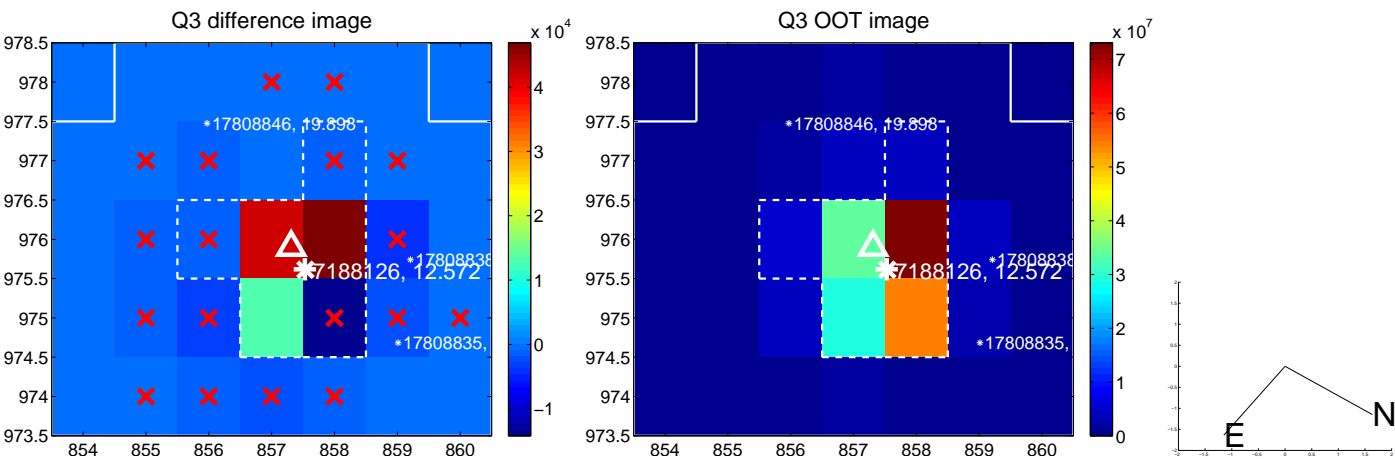
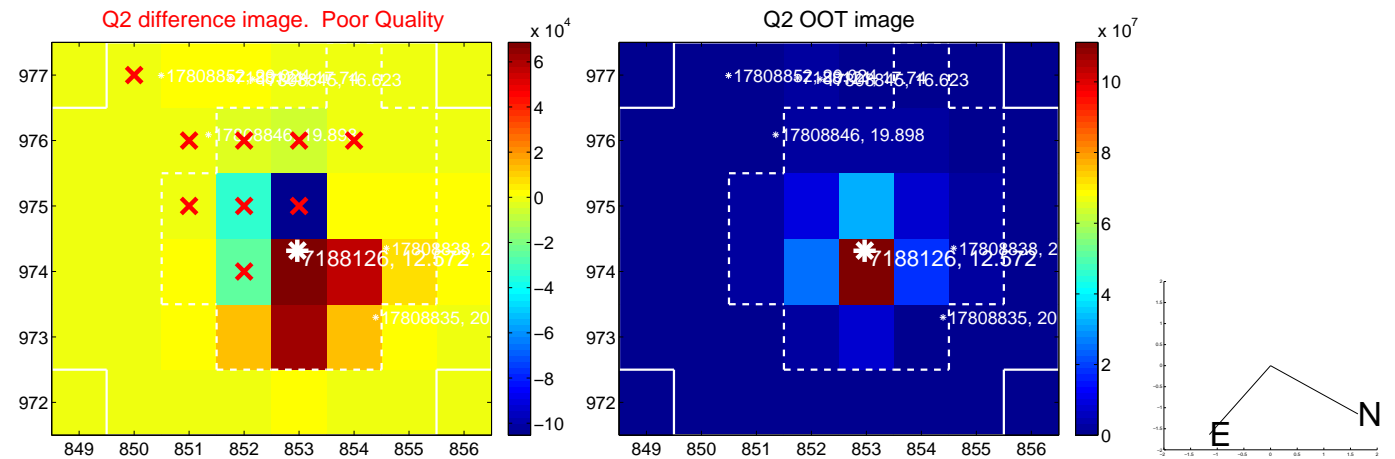
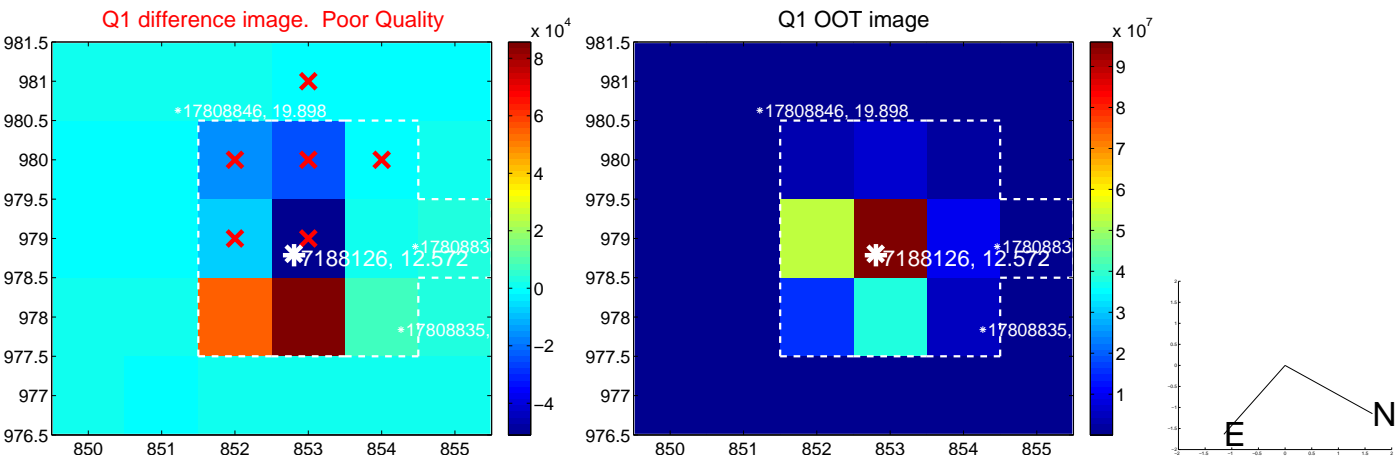
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.915 \pm 0.327$	2.80	$0.192 \pm 0.457$	$-0.894 \pm 0.320$
PRF-fit source offset from KIC position	$0.916 \pm 0.343$	2.67	$0.214 \pm 0.470$	$-0.890 \pm 0.334$
photometric centroid source offset	—	—	—	—

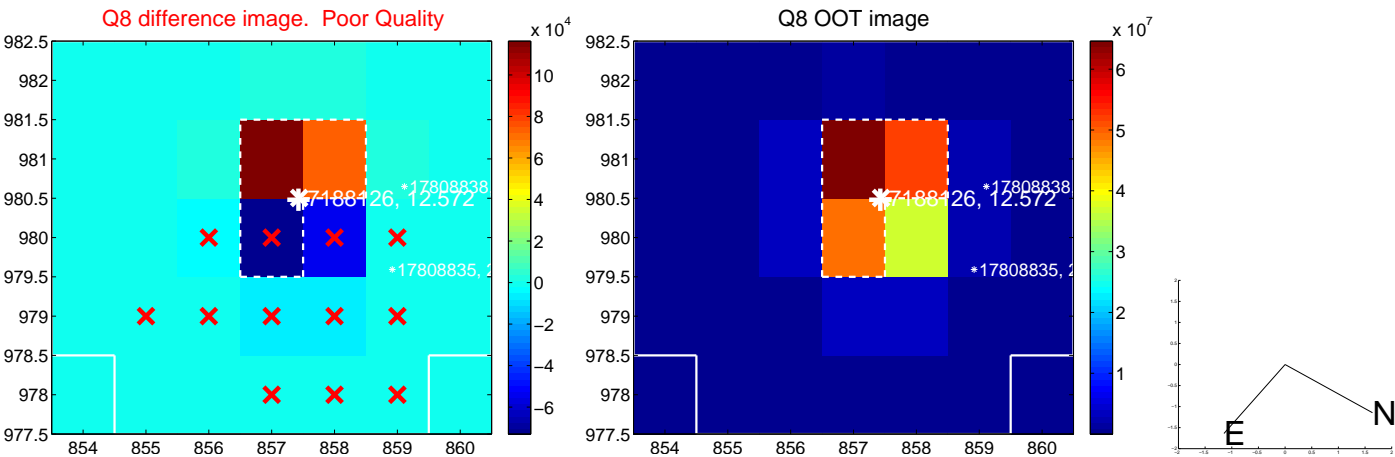
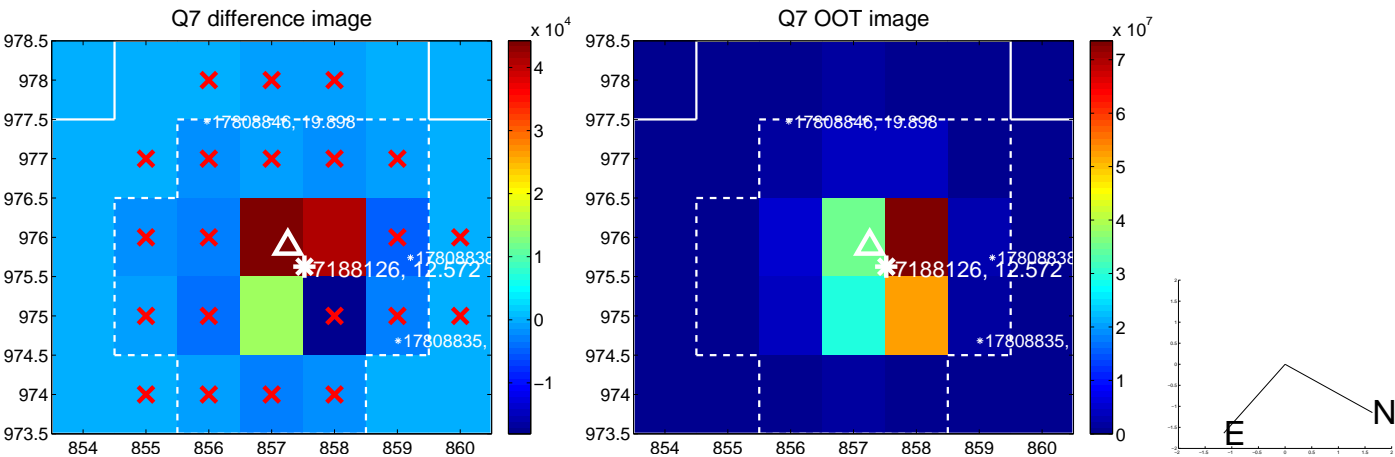
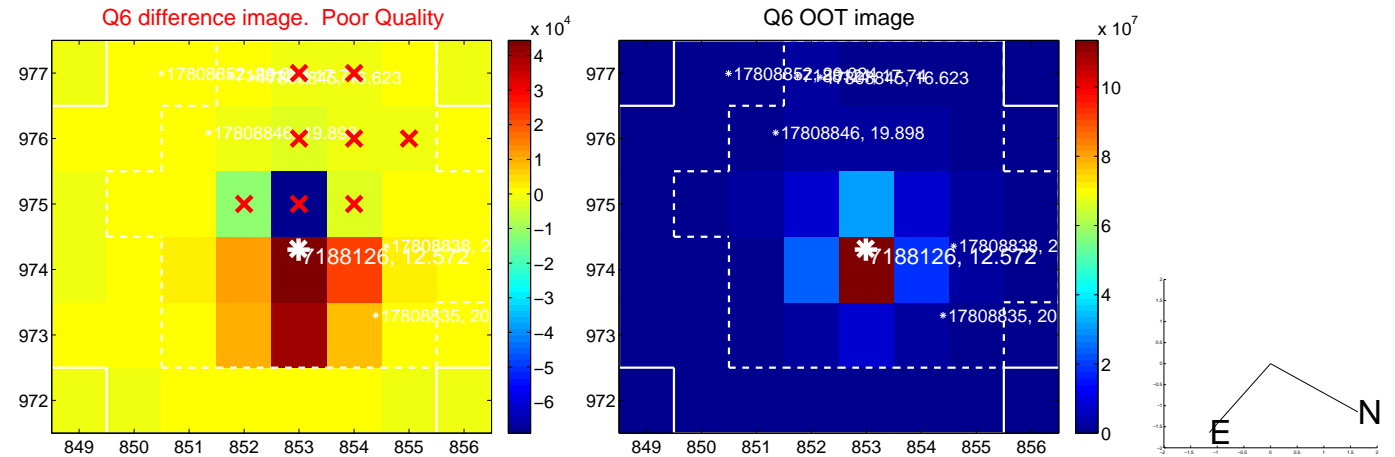
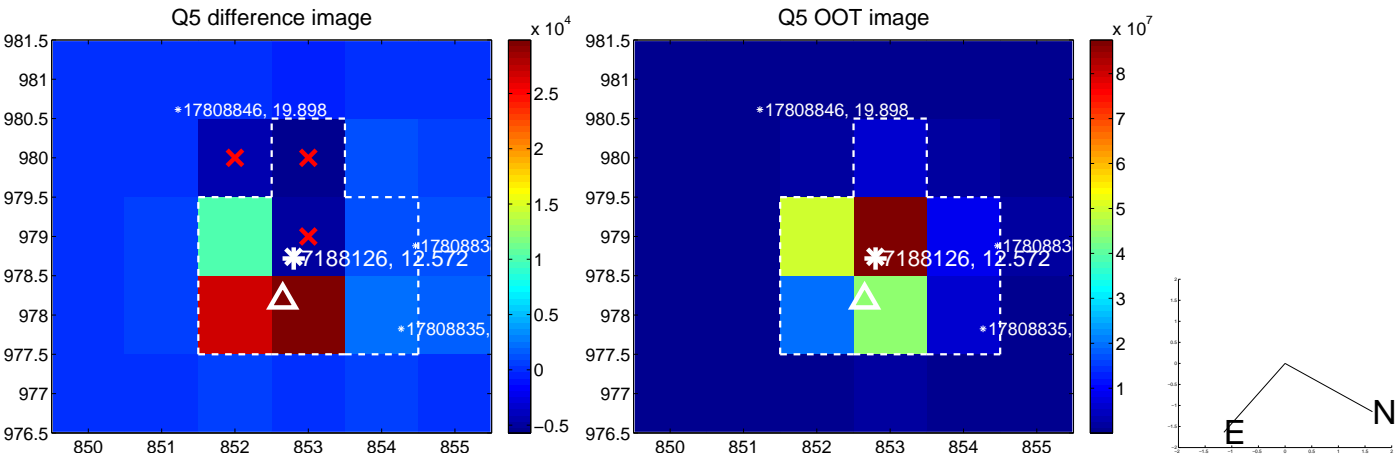


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three- $\sigma$ . Red \*: target star. Blue \*: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

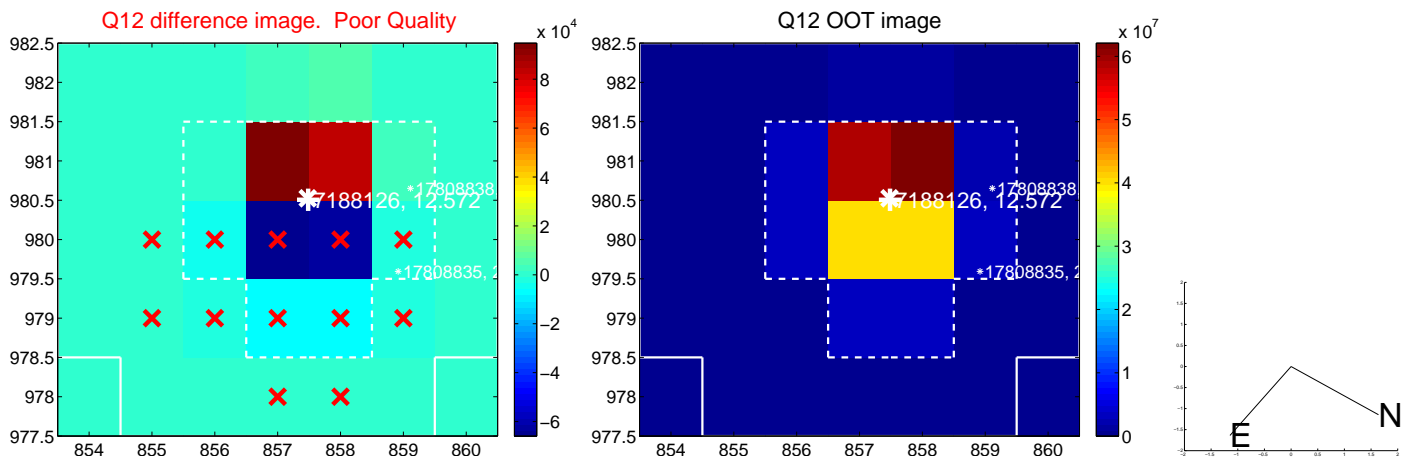
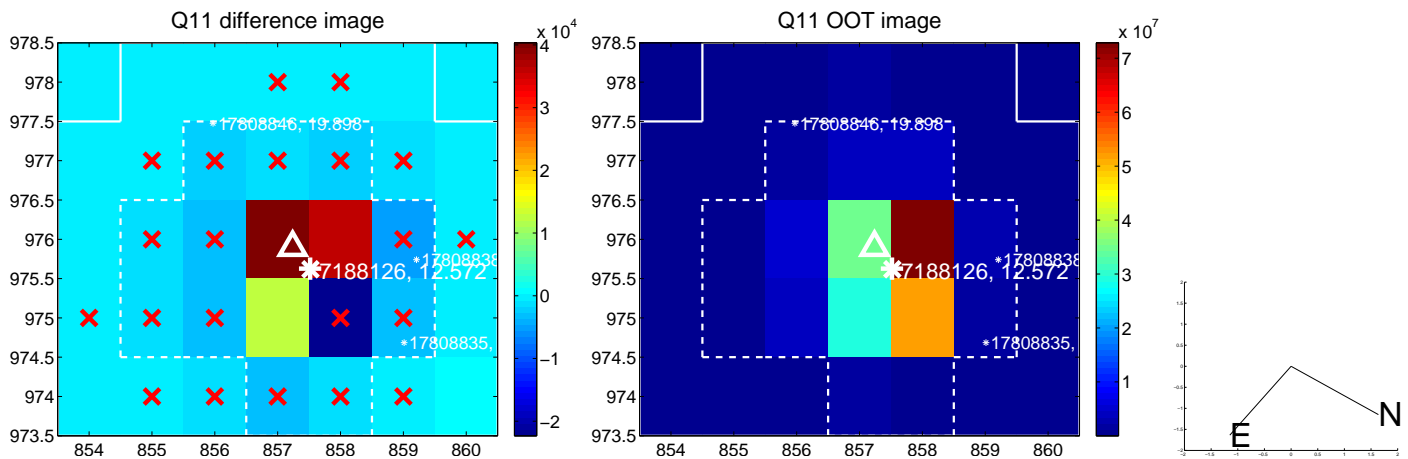
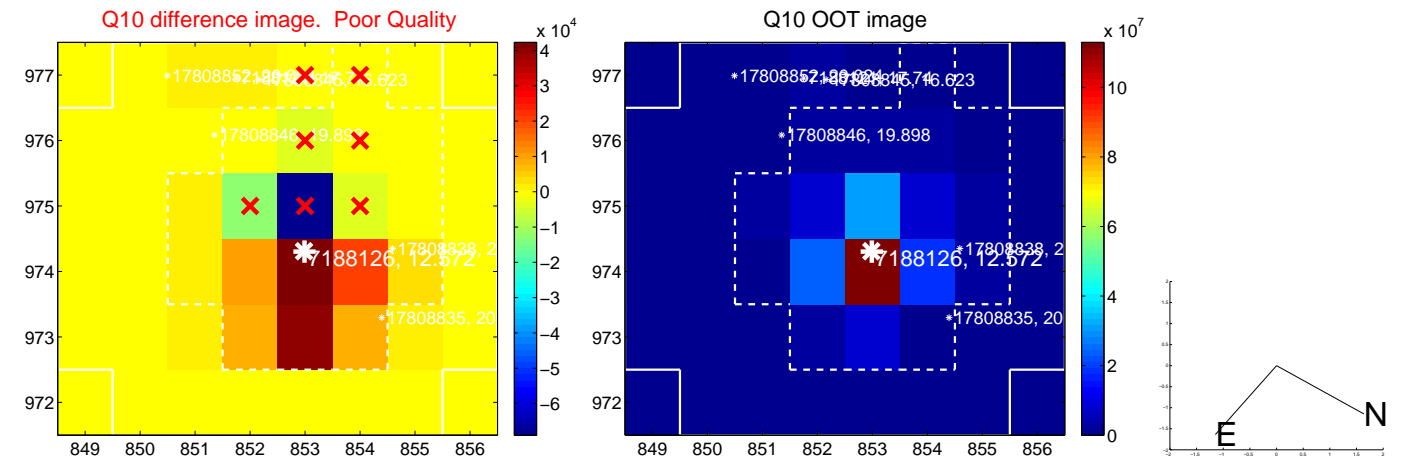
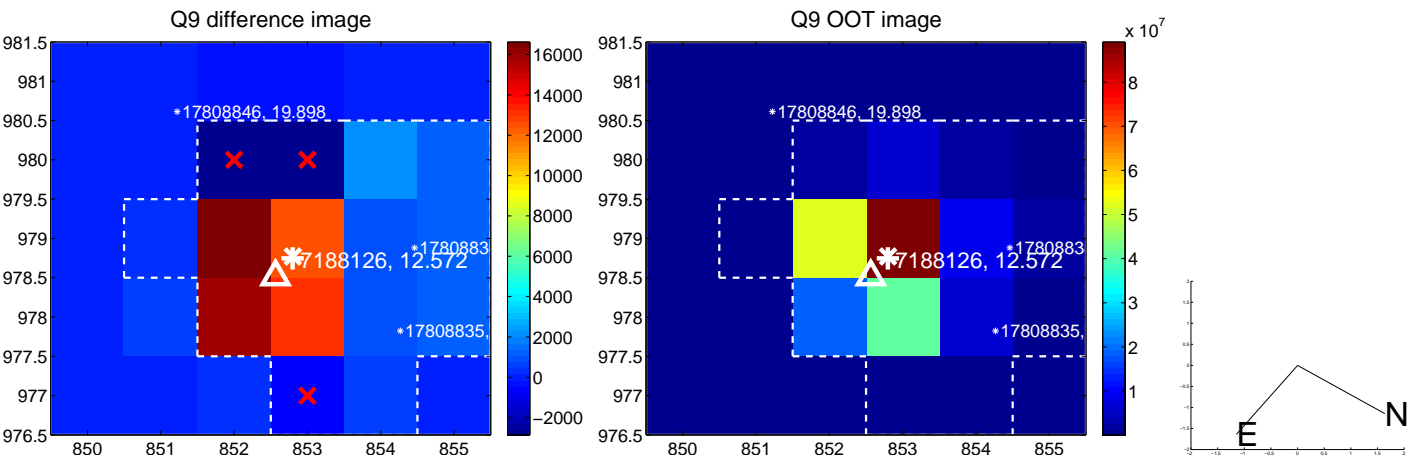


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

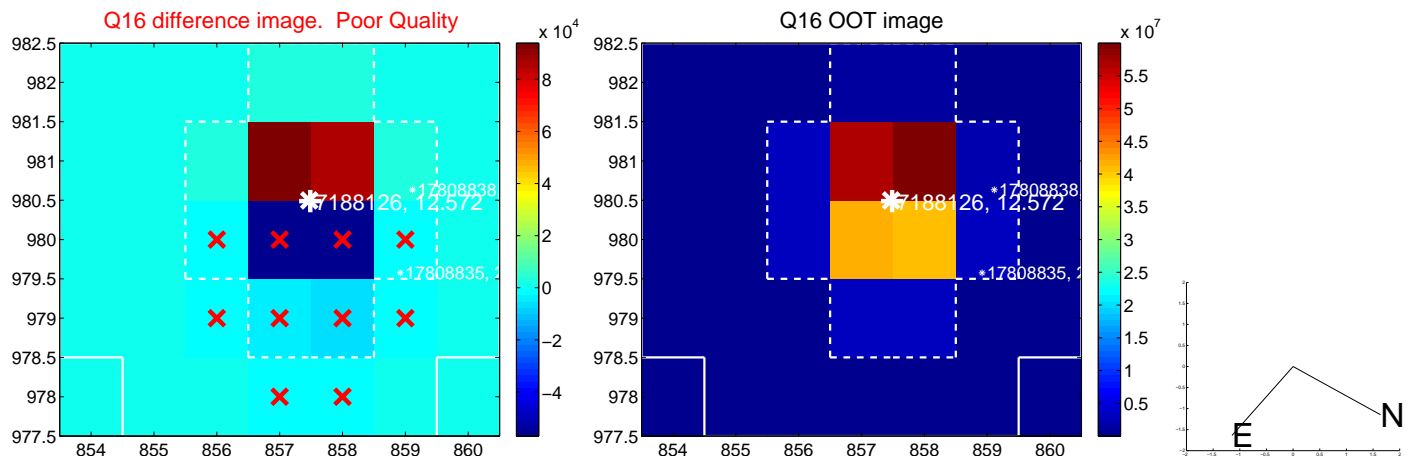
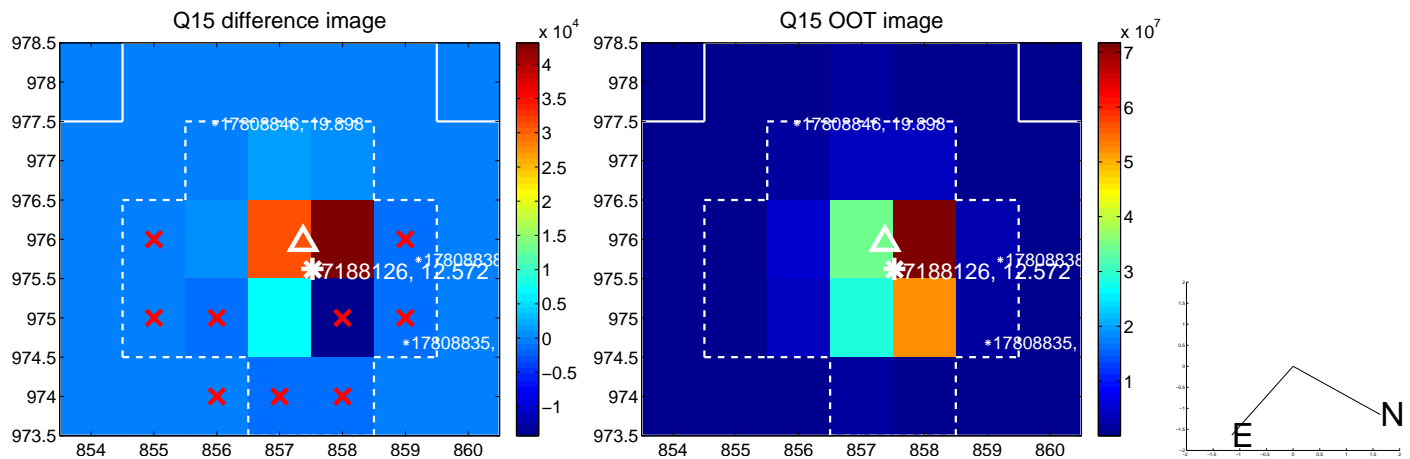
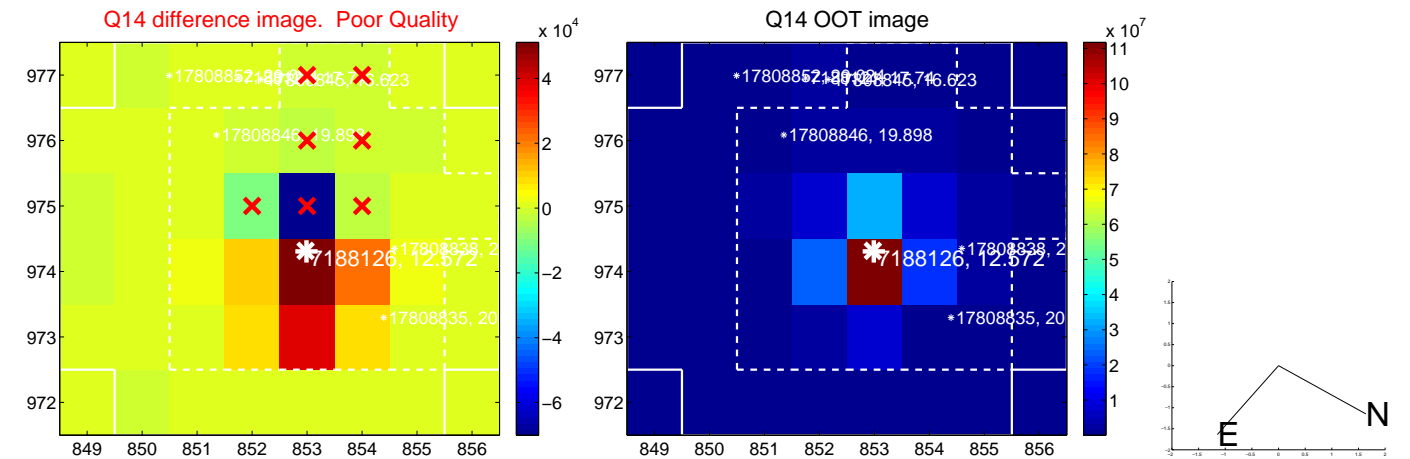
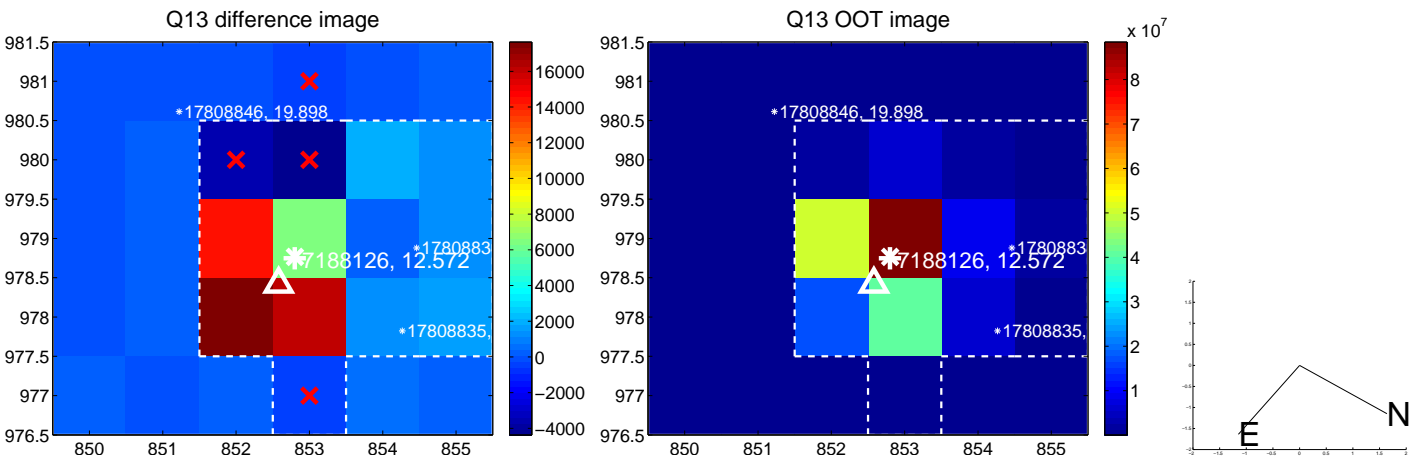




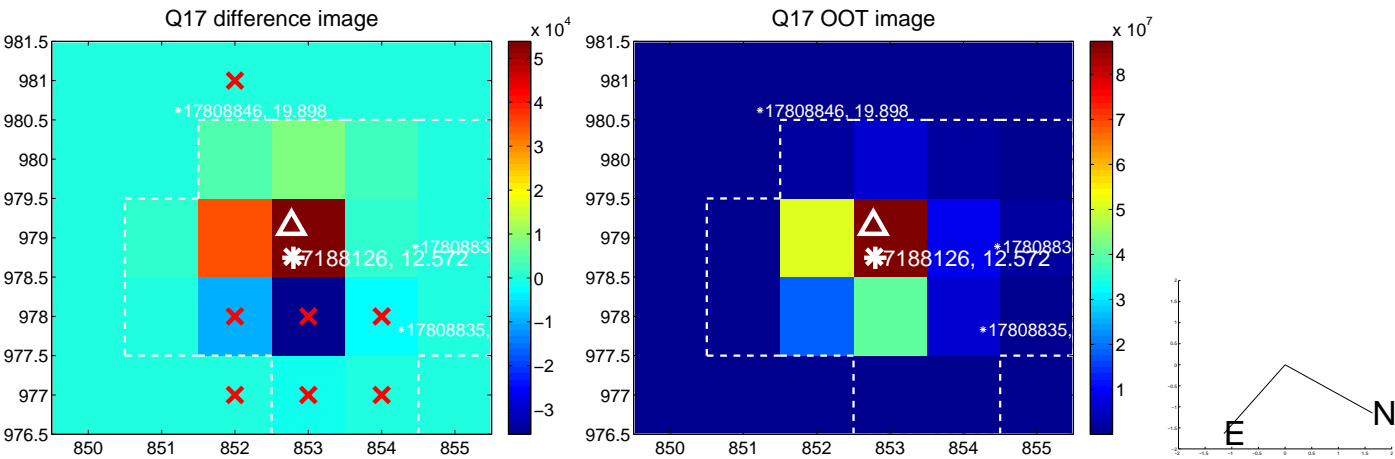
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

